



Meeting Minutes
March 26, 2010 - 2:00 PM
Franklin Marriott Cool Springs Conference Center

Attendees:

Dorie Bolze, HRWA	Tom Puckett, HB&TS
David Duhl, TDEC	Carl Scott, Milcrofton
Kristi Earwood, Attorney for Williamson County	Howard Smithson, Milcrofton
Kim Elkin, TWRA	Eric Stuckey, City of Franklin
Scott Gain, USGS	Rob Todd, TWRA
Eric Gardner, City of Franklin	Sherry Wang, TDEC
Tim Ham, Mallory Valley	Troy Watkins, HB&TS
Doug Hausken, Cumberland River Compact	Bobby Worthington, HVUD
Mark Hilty, City of Franklin	Kati Bell, CDM
Deedee Kathman, TDOT	Zack Daniel, CDM
Lee Keck, TDEC	Jamie Lefkowitz, CDM
Dan Klatt, City of Franklin	Chris Provost, CDM
Roger Lindsey, Franklin Planning Commission	Dan Rodrigo, CDM
Ken Moore, BOMA	Kirk Westphal, CDM
David Parker, City of Franklin	Leeann Williams, CDM

Introduction

Workshop 2 was started with a status update of the IWRP project. Since Workshop 1, during which Stakeholders developed Objectives and identified preliminary Performance Measures, an updated list of Performance Measures has been developed. One of the primary goals of Workshop 2 was to discuss and reach consensus on the Performance Measures. Also since Workshop 1, Stakeholders provided weighting for the 9 Objectives by submitting the Objectives Weighting Form; results of these forms were compiled for presentation at Workshop 2.

Weighted Objectives

The Objectives weighting form was completed by 15 Stakeholders. Compiled results are shown with the high, low, and average values for each Objective in the figure on page 4 of these meeting minutes. Examples were shown of how the weighted Objectives would influence the decision-making process.

Performance Measures

The Performance Measures are a means to determine if an Objective is met through a particular alternative. Performance Measures may be either quantitative or qualitative. An updated Performance Measure table is included on page 5 of these meeting minutes along with a definition of whether a Performance Measure is quantitative or qualitative. A discussion of the Objectives is included below only if there was discussion on or changes made to the Objective during the Workshop.



Objective 1 - Meet current and future demands for water and wastewater reliably

Clarification on the terms “regional” and “redundancy” was required for the Performance Measures for this Objective. “Regional” will be removed from Performance Measure titles in this section, since all options will consider the three categories: city, UGB, and region. Furthermore, the options considered during the IWRP process will define the region. “Redundancy” as measured here means the excess supply after demands are met (the first and second Performance Measures for this Objective). The results could potentially be negative, which would mean demands were not met.

Some of the Performance Measures are defined as a percentage of occurrences. There was discussion on whether this is the best evaluation method, since one occurrence could signal a system failure. It was determined that the Performance Measures may be defined such that they will recognize any failure appropriately. To achieve this, two additional Performance Measures were added to reflect the deficiency magnitudes for essential and non-essential uses.

Objective 2 - Provide safety and security of water resources systems

Concern was raised over the perception that septic systems are always unsafe. For purposes of the IWRP, the percentage of the population with septic systems will be used as relative measure to calculate potential failures. It was also suggested that Inflow and Infiltration be included in this Objective as a qualitative Performance Measure. After some discussion, an overarching vulnerability Performance Measure was agreed upon to include wastewater collection system infiltration/inflow, vandalism, infrastructure age, etc.

After discussion on secondary drinking water standards (included in Objective 9), a new Performance Measure was proposed for this Objective, to address emerging water quality concerns. This Performance Measure will address anticipated new regulations on pharmaceuticals, etc.

Objective 3 - Maximize efficiency of water use and value of water resources

A suggestion was made to add a leak reduction Performance Measure to this Objective. Discussion was held on whether to call this “unaccounted water” or “non-revenue” water. It was decided that the measure be called unaccounted water.

Objective 4 - Improve water quality and ecological health of Harpeth River and watershed

The Performance Measure “negative impacts of stormwater” is qualitative, and there was some discussion on how to evaluate this. Likely, more stormwater volume will have a negative impact. The existing policy in Franklin is to retain water in all new developments.

It was suggested that duration should be considered in addition to “low flow frequency.” If a standard low flow value such as the median September value is used for the frequency, the duration will be considered as well.



The Performance Measure of phosphorus load to the River will be changed to nitrogen load to the River. The load will be measured as total, and the average may be evaluated over time. The summer season will be defined as May through October for both phosphorus load and BOD load Performance Measures.

Objective 5 - Provide improved access and aesthetics of Harpeth River

The % stream flow as effluent is likely to have a negative connotation- this is one area for public education. A clearer Performance Measure was requested for this Objective and after discussion; a public accessibility factor comprised of access points, recreation potential, etc. has been included.

Objective 6 - Minimum carbon footprint of water resources operations

Suggestions for this Objective included consideration of LEED construction and alternative energy sources. This Performance Measure should encompass all these considerations.

Objective 8 - Achieve regional acceptance

A public education effort should begin now to ensure public acceptance of this plan. This may be achieved in part through the website and activities such as online polling.

Model Introduction

The IWRP will evaluate all the water systems in a holistic manner; this concept was demonstrated with a process diagram showing the water cycle that governs this project, and how a single change may affect multiple systems.

The software being used for analysis for the IWRP is "STELLA." A demonstration of the model was shown, with the Harpeth River as the central and the water systems working in conjunction. Example scenarios were presented, and the resulting change in river flows and water demands were shown. More information on STELLA, as well as a trial version of the software, may be found at the following website:

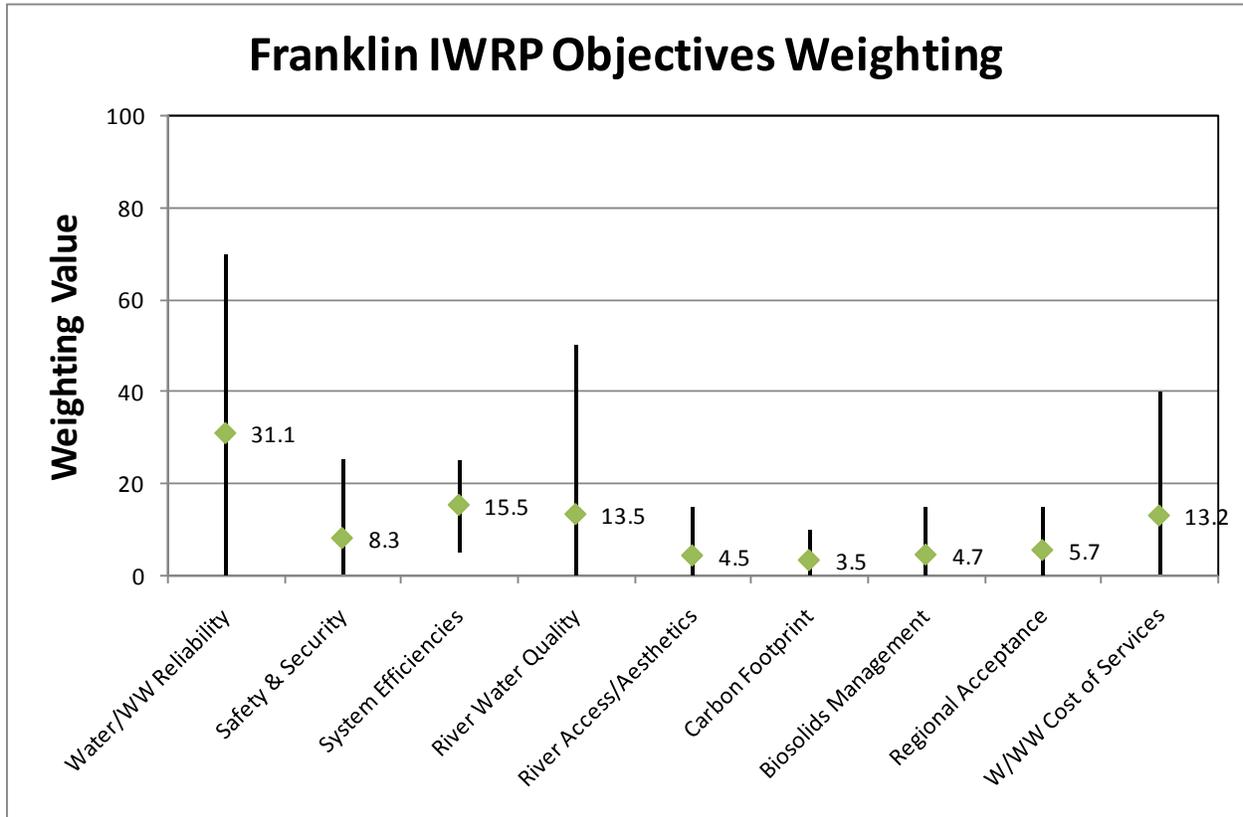
<http://www.iseesystems.com/software/Education/StellaSoftware.aspx> .

Technical forums will be held May 5th and 11th, and Stakeholders are invited to learn more regarding the technical development of the model and have the opportunity to interactively evaluate the tool.

Options

During the Stakeholder meeting, a handout was provided that included a list of potential project options for each system including water, wastewater, stormwater, reclaimed water, and the Harpeth River. These options were compiled from existing studies and plans, and do not exclude any feasible project option from consideration. Stakeholders were asked to review these and provide comments to Kati Bell at BellKY@cdm.com.

Workshop 3 is scheduled for June 2nd to discuss the options and begin to develop project alternatives from various sets of options.





Objectives	Performance Measures	Quantitative	Qualitative
Meet current and future demands for water and wastewater reliably	% of time all water demands met	•	
	Average magnitude of deficits (all uses) ¹	•	
	% of time essential water demands met	•	
	Average magnitude of deficits (essential uses)	•	
	Volume of supply redundancy	•	
	Volume of wastewater capacity surplus or shortfall	•	
Provide safety and security of water resources systems	% of total wastewater on septic ²	•	
	Change in 100 year flood elevation		•
	Vulnerability of infrastructure and facilities ³		•
	Emerging water quality concerns		•
Maximize efficiency of water use and value of water resources	% demand reduction	•	
	% reduction in unaccounted for water	•	
	% reduction in inflow and infiltration		•
	% total reuse demand satisfied	•	
	Volume of stormwater put to beneficial use	•	
Improve water quality and ecological health of Harpeth River and watershed	Frequency of low flow < historical September median flow	•	
	Average summer nitrogen load (lb/day) ⁴	•	
	Average summer BOD load (lb/day)	•	
	Ecological indicators ⁵		•
	Negative impacts of stormwater reduced ⁶		•
Provide improved access and aesthetics of Harpeth River	Feet of bank stabilization	•	
	% of stream flow that is WWTP effluent	•	
	Erosion potential		•
	Public accessibility ⁷		•
Minimize carbon footprint of water resources operations	Annual average energy requirements	•	
Achieve sustainable biosolids management	% of total biosolids handled sustainably	•	
Achieve regional acceptance	Number of cooperative agreements proposed	•	
	Sphere of positive influence (population)	•	
	Likelihood of public acceptance		•
Provide level of services for water resources at reasonable cost	Life-cycle cost of projects and policies	•	
	Combined % change in water and sewer rates	•	
	Meet secondary drinking water standards (taste, odor, etc.)		•

1 This is total volume of deficits divided by total days of deficits

2 What is the geographic boundary under consideration?

3 To include consideration of: flood safety; accessibility; security; age of facilities and infrastructure; number of facilities; susceptibility to climate change; vandalism; terrorism

4 Summer is defined as May through October

5 Further definition of ecological indicators needed

6 Meant to encompass more than just volume captured

7 To include access points, recreation potential, etc.